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PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


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 NEWS  1          Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2          "Ask CAS" for self-help around the clock
 NEWS  3  SEP 09  ACD predicted properties enhanced in REGISTRY/ZREGISTRY
 NEWS  4  OCT 03  MATHDI removed from STN
 NEWS  5  OCT 04  CA/CAplus-Canadian Intellectual Property Office (CIPO) added
                  to core patent offices
 NEWS  6  OCT 13  New CAS Information Use Policies Effective October 17, 2005
 NEWS  7  OCT 17  STN(R) AnaVist(TM), Version 1.01, allows the export/download
                  of CAplus documents for use in third-party analysis and
                  visualization tools
 NEWS  8  OCT 27  Free KWIC format extended in full-text databases
 NEWS  9  OCT 27  DIOGENES content streamlined
 NEWS 10  OCT 27  EPFULL enhanced with additional content
 NEWS 11  NOV 14  CA/CAplus - Expanded coverage of German academic research
 NEWS 12  NOV 30  REGISTRY/ZREGISTRY on STN(R) enhanced with experimental
                  spectral property data
 NEWS 13  DEC 05  CASREACT(R) - Over 10 million reactions available
 NEWS 14  DEC 14 2006 MeSH terms loaded in MEDLINE/LMEDLINE
 NEWS 15  DEC 14 2006 MeSH terms loaded for MEDLINE file segment of TOXCENTER
 NEWS 16  DEC 14 CA/CAplus to be enhanced with updated IPC codes
 NEWS 17  DEC 16 MARPATprev will be removed from STN on December 31, 2005
 NEWS 18  DEC 21 IPC search and display fields enhanced in CA/CAplus with the
                 IPC reform
 NEWS 19  DEC 23 New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/USPAT2

 NEWS EXPRESS  JANUARY 03 CURRENT VERSION FOR WINDOWS IS V8.01,
               CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.
               V8.0 USERS CAN OBTAIN THE UPGRADE TO V8.01 AT
               http://download.cas.org/express/v8.0-Discover/

 NEWS DCOST    SINCE APPROXIMATELY 20:00 COLUMBUS TIME DECEMBER 29,
               SOME ONLINE COST DISPLAYS HAVE BEEN SHOWING COSTS IN
               2006 PRICES FOR STN COLUMBUS FILES.  THIS HAS BEEN
               CORRECTED.  PLEASE BE ASSURED THAT YOU WILL BE BILLED
               ACCORDING TO 2005 PRICES UNTIL JAN 1.  PLEASE CONTACT
               YOUR LOCAL HELP DESK IF YOU HAVE ANY QUESTIONS.  WE
               APOLOGIZE FOR THE ERROR.

 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS INTER    General Internet Information
 NEWS LOGIN    Welcome Banner and News Items
 NEWS PHONE    Direct Dial and Telecommunication Network Access to STN
 NEWS WWW      CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.
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FILE 'HOME' ENTERED AT 17:25:56 ON 10 JAN 2006

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 17:26:05 ON 10 JAN 2006
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 9 JAN 2006 HIGHEST RN 871542-42-6
DICTIONARY FILE UPDATES: 9 JAN 2006 HIGHEST RN 871542-42-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

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**********************************************************************
*                                                                    *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,    *
* effective March 20, 2005.  A new display format, IDERL, is now     *
* available and contains the CA role and document type information.  *
*                                                                    *
**********************************************************************
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Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> e naphthalene dicarboxylic acid/cn

E1	1	NAPHTHALENE DEGRADATION REGULATOR PROTEIN SEQUENCE HOMOLOG (RHODOCOCCUS STRAIN P400 GENE NARR1)/CN
E2	1	NAPHTHALENE DEGRADATION REGULATOR PROTEIN SEQUENCE HOMOLOG (RHODOCOCCUS STRAIN P400 GENE NARR2)/CN
E3	0 -->	NAPHTHALENE DICARBOXYLIC ACID/CN
E4	1	NAPHTHALENE DICATION/CN
E5	1	NAPHTHALENE DIHYDRODIOL DEHYDROGENASE/CN
E6	1	NAPHTHALENE DIISOCYANATE/CN
E7	1	NAPHTHALENE DIISOCYANATE HOMOPOLYMER/CN
E8	1	NAPHTHALENE DIISOCYANATE-POLYETHYLENE PROPYLENE GLYCOL 1,4-B IS(2-HYDROXYETHOXY)BENZENE ETHER COPOLYMER/CN

```
E9            1     NAPHTHALENE DIISOCYANATE-PROPYLENE GLYCOL COPOLYMER/CN
E10           1     NAPHTHALENE DIISOCYANATE-PROPYLENE GLYCOL COPOLYMER SRU/CN
E11           1     NAPHTHALENE DIISOCYANATE-PTMG COPOLYMER/CN
E12           1     NAPHTHALENE DIMER/CN

=> e naphthalene dicarboxylic acid/cn
E1            1     NAPHTHALENE DEGRADATION REGULATOR PROTEIN SEQUENCE HOMOLOG (
                    RHODOCOCCUS STRAIN P400 GENE NARR1)/CN
E2            1     NAPHTHALENE DEGRADATION REGULATOR PROTEIN SEQUENCE HOMOLOG (
                    RHODOCOCCUS STRAIN P400 GENE NARR2)/CN
E3            0 --> NAPHTHALENE DICARBOXYLIC ACID/CN
E4            1     NAPHTHALENE DICATION/CN
E5            1     NAPHTHALENE DIHYDRODIOL DEHYDROGENASE/CN
E6            1     NAPHTHALENE DIISOCYANATE/CN
E7            1     NAPHTHALENE DIISOCYANATE HOMOPOLYMER/CN
E8            1     NAPHTHALENE DIISOCYANATE-POLYETHYLENE PROPYLENE GLYCOL 1,4-B
                    IS(2-HYDROXYETHOXY)BENZENE ETHER COPOLYMER/CN
E9            1     NAPHTHALENE DIISOCYANATE-PROPYLENE GLYCOL COPOLYMER/CN
E10           1     NAPHTHALENE DIISOCYANATE-PROPYLENE GLYCOL COPOLYMER SRU/CN
E11           1     NAPHTHALENE DIISOCYANATE-PTMG COPOLYMER/CN
E12           1     NAPHTHALENE DIMER/CN

=> s naphthalene dicarboxylic acid
        380625 NAPHTHALENE
        295936 DICARBOXYLIC
       7429454 ACID
          8873 ACIDS
       7436075 ACID
                  (ACID OR ACIDS)
L1        7713 NAPHTHALENE DICARBOXYLIC ACID
                  (NAPHTHALENE(W)DICARBOXYLIC(W)ACID)

=> d l1

L1   ANSWER 1 OF 7713  REGISTRY  COPYRIGHT 2006 ACS on STN
RN   871210-01-4  REGISTRY *
* Use of this CAS Registry Number alone as a search term in other STN files may
  result in incomplete search results.  For additional information, enter HELP
  RN* at an online arrow prompt (=>).
ED   Entered STN:  05 Jan 2006
CN   Rubber, synthetic, butanediol-naphthalenedicarboxylic
     acid-polytetramethylene glycol, block  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   Polyester rubber, butanediol-naphthalenedicarboxylic
     acid-polytetramethylene glycol, block
OTHER NAMES:
CN   Block butanediol-naphthalenedicarboxylic acid-polytetramethylene
     glycol rubber
CN   Butanediol-naphthalenedicarboxylic acid-polytetramethylene glycol,
     block rubber
CN   EN 1000
CN   L 4310AN
CN   Nouvelan L 4310AN
CN   Pelprene EN 1000
MF   Unspecified
CI   MAN, CTS
SR   CA

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***


=> file caplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
```

FULL ESTIMATED COST 17.50 17.71

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FILE COVERS 1907 - 10 Jan 2006 VOL 144 ISS 3
FILE LAST UPDATED: 9 Jan 2006 (20060109/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

```
=> s  871210-01-4/prep
            0 871210-01-4
      3407251 PREP/RL
L2          0 871210-01-4/PREP
                (871210-01-4 (L) PREP/RL)

=> s  871210-01-4
   REGISTRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.




L4          0 L3


=> file caplus
COST IN U.S. DOLLARS                        SINCE FILE      TOTAL
                                               ENTRY    SESSION
FULL ESTIMATED COST                             2.41      24.92

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FILE COVERS 1907 - 10 Jan 2006 VOL 144 ISS 3
FILE LAST UPDATED: 9 Jan 2006 (20060109/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

```
=> s  871210-01-4/prep
             0 871210-01-4
       3407251 PREP/RL
L5           0 871210-01-4/PREP
                 (871210-01-4 (L) PREP/RL)

=> s  871210-01-4
   REG1stRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.




L7           0 L6


=> d his

     (FILE 'HOME' ENTERED AT 17:25:56 ON 10 JAN 2006)

     FILE 'REGISTRY' ENTERED AT 17:26:05 ON 10 JAN 2006
                E NAPHTHALENE DICARBOXYLIC ACID/CN
                E NAPHTHALENE DICARBOXYLIC ACID/CN
L1          7713 S NAPHTHALENE DICARBOXYLIC ACID

     FILE 'CAPLUS' ENTERED AT 17:28:07 ON 10 JAN 2006
L2             0 S  871210-01-4/PREP
                 S 871210-01-4/REG#

     FILE 'REGISTRY' ENTERED AT 17:28:44 ON 10 JAN 2006
L3             1 S 871210-01-4/RN

     FILE 'CAPLUS' ENTERED AT 17:28:44 ON 10 JAN 2006
L4             0 S L3

     FILE 'CAPLUS' ENTERED AT 17:29:06 ON 10 JAN 2006
L5             0 S  871210-01-4/PREP
                 S 871210-01-4/REG#

     FILE 'REGISTRY' ENTERED AT 17:29:30 ON 10 JAN 2006
L6             1 S 871210-01-4/RN

     FILE 'CAPLUS' ENTERED AT 17:29:30 ON 10 JAN 2006
L7             0 S L6

=> s l1
L8        13989 L1

=> s l8 and dimethylnaphthalene (l) (oxygen or air)
           3744 DIMETHYLNAPHTHALENE
            553 DIMETHYLNAPHTHALENES
```

```
          3943 DIMETHYLNAPHTHALENE
                 (DIMETHYLNAPHTHALENE OR DIMETHYLNAPHTHALENES)
        703721 OXYGEN
          6714 OXYGENS
        708408 OXYGEN
                 (OXYGEN OR OXYGENS)
        911308 AIR
           277 AIRS
        911436 AIR
                 (AIR OR AIRS)
           234 DIMETHYLNAPHTHALENE (L) (OXYGEN OR AIR)
L9          59 L8 AND DIMETHYLNAPHTHALENE (L) (OXYGEN OR AIR)

=> s l9 and cobalt and manganese
        361812 COBALT
            95 COBALTS
        361815 COBALT
                 (COBALT OR COBALTS)
        348076 MANGANESE
           109 MANGANESES
        348086 MANGANESE
                 (MANGANESE OR MANGANESES)
L10         32 L9 AND COBALT AND MANGANESE

=> s l10 and bromine
         50267 BROMINE
           162 BROMINES
         50365 BROMINE
                 (BROMINE OR BROMINES)
L11         17 L10 AND BROMINE

=> s l11 and solvent
        650084 SOLVENT
        319547 SOLVENTS
        816207 SOLVENT
                 (SOLVENT OR SOLVENTS)
L12         12 L11 AND SOLVENT

=> s l11 and acetic acid
        218959 ACETIC
            22 ACETICS
        218968 ACETIC
                 (ACETIC OR ACETICS)
       4083799 ACID
       1506026 ACIDS
       4569502 ACID
                 (ACID OR ACIDS)
        192581 ACETIC ACID
                 (ACETIC(W)ACID)
L13          9 L11 AND ACETIC ACID

=> d l13 ibib ab 1-9

L13  ANSWER 1 OF 9  CAPLUS  COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:         2004:143223  CAPLUS
DOCUMENT NUMBER:          140:181971
TITLE:                    Preparation method of naphthalene dicarboxylic acid
INVENTOR(S):              Lee, Jong-in; Kim, Han-seok; Kim, Byung-hee; Roh,
                          Hang-duk; Lee, Youn-seo; Jo, Joon-sang
PATENT ASSIGNEE(S):       SK Chemicals Co., Ltd., S. Korea
SOURCE:                   PCT Int. Appl., 27 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
```

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004015003	A2	20040219	WO 2003-KR883	20030502
WO 2004015003	A3	20040715		
W: JP, US				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
EP 1542959	A2	20050622	EP 2003-719253	20030502
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK				
JP 2005535703	T2	20051124	JP 2004-527406	20030502
PRIORITY APPLN. INFO.:			KR 2002-46765 A	20020808
			WO 2003-KR883 W	20030502

AB The present invention relates to a method for the preparation of naphthalene dicarboxylic acid, and more particularly, to a method for the preparation of naphthalene dicarboxylic acid by oxidizing **dimethylnaphthalene** with **oxygen** in **air** in the presence of **acetic acid** solvent using the metal catalysts of **cobalt** and **manganese**, and using **bromine** as a reaction initiator, wherein the temperature of said oxidation reaction is 155-180°. The method for the preparation of naphthalene dicarboxylic acid of the invention enables the preparation of naphthalene dicarboxylic acid having high purity with a high yield in an economical way at a low temperature

L13 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:793550 CAPLUS
DOCUMENT NUMBER: 139:278252
TITLE: Process for manufacturing 1,4-naphthalenedicarboxylic acid
INVENTOR(S): Suga, Hiroshi; Honma, Hirotoshi; Sugiura, Kazuki
PATENT ASSIGNEE(S): Sumikin Air Water Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003286221	A2	20031010	JP 2002-94873	20020329
PRIORITY APPLN. INFO.:			JP 2002-94873	20020329

OTHER SOURCE(S): CASREACT 139:278252
AB In the process for manufacturing 1,4-naphthalenedicarboxylic acid (I) by oxidizing 1,4-dialkylnaphthalene by mol. oxygen in a lower aliphatic carboxylic acid solvent containing catalysts comprising transition metal compds. and **bromine** compds., the oxygen-containing gas is supplied so that the oxygen/starting material mol ratio is 3.1 to 3.5 and the concentration of oxygen in the exhaust gas is ≤ 2%. The title process gives highly pure I.

L13 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:221639 CAPLUS
DOCUMENT NUMBER: 138:254967
TITLE: Liquid-phase oxidation process and catalyst system for the preparation of 2,6-naphthalenedicarboxylic acid from 2,6-dimethylnaphthalene
INVENTOR(S): Castiglioni, Gian Luca; Fumagalli, Carlo; Pirola, Roberto
PATENT ASSIGNEE(S): Lonza S.p.A., Italy
SOURCE: PCT Int. Appl., 15 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003022791	A1	20030320	WO 2002-EP10002	20020906
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1291338	A1	20030312	EP 2001-830573	20010907
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
EP 1427690	A1	20040616	EP 2002-797956	20020906
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
CN 1551865	A	20041201	CN 2002-817326	20020906
JP 2005502694	T2	20050127	JP 2003-526869	20020906
US 2004210084	A1	20041021	US 2004-488691	20040305

PRIORITY APPLN. INFO.:	EP 2001-830573	A	20010907
	WO 2002-EP10002	W	20020906

OTHER SOURCE(S): CASREACT 138:254967

AB 2,6-Naphthalenedicarboxylic acid, useful as a polyester monomer (no data), is prepared by the liquid-phase oxidation of 2,6-**dimethylnaphthalene** in an aliphatic carboxylic acid-acidic solution in the presence of a **cobalt-manganese-bromine** catalyst (e.g., a **cobalt** acetate-**manganese** acetate-ammonium bromide mixture) with an **oxygen**-containing feed gas (e.g., **air**) being introduced into the reaction zone such that the **oxygen** content in the dry exhaust gas is ≤1 volume%.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:244621 CAPLUS
DOCUMENT NUMBER: 130:297087
TITLE: Catalytic production of 2,6-naphthalenedicarboxylic acid
INVENTOR(S): Sumner, Charles Edwan, Jr.; Arnold, Ernest William, III
PATENT ASSIGNEE(S): Eastman Chemical Company, USA
SOURCE: PCT Int. Appl., 17 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9918059	A1	19990415	WO 1998-US19802	19980922
W: JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				

PRIORITY APPLN. INFO.: US 1997-60915P P 19971003
US 1998-100556 A 19980619

AB 2,6-Naphthalenedicarboxylic acid (NDA) is manufactured by the liquid-phase oxidation of 2,6-**dimethylnaphthalene** with a mol. **oxygen**-containing gas in the presence of a catalyst system comprising Co 1000-3000, Mn 500-3000, and Br 500-2500 ppm and a solvent/reaction medium comprising **acetic acid** containing ≥15 weight% water at 150-220° and 8-23 bar absolute pressure. The use of ≥15 weight% water produces a crude NDA that contains relatively small amts. of residual catalyst metals in comparison to crude NDA produced by similar processes known in the art. In addition, the process results in a lower amount of the **acetic acid** solvent/reaction medium being oxidized (decomposed) during the oxidation process.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1994:33367 CAPLUS
DOCUMENT NUMBER: 120:33367
TITLE: Method for purifying a naphthalenedicarboxylic acid
INVENTOR(S): Sikkenga, David L.; Hoover, Stephen V.
PATENT ASSIGNEE(S): Amoco Corp., USA
SOURCE: U.S., 10 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5256817	A	19931026	US 1992-900618	19920618
WO 9400413	A1	19940106	WO 1993-US5786	19930616
W: AU, BG, BR, CA, HU, JP, KR, NO, RO, RU				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9346382	A1	19940124	AU 1993-46382	19930616
EP 601177	A1	19940615	EP 1993-916582	19930616
EP 601177	B1	19970917		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
JP 06509823	T2	19941102	JP 1993-502445	19930616
AT 158272	E	19971015	AT 1993-916582	19930616
ES 2110619	T3	19980216	ES 1993-916582	19930616
RU 2128641	C1	19990410	RU 1994-21689	19930616

PRIORITY APPLN. INFO.: US 1992-900593 A 19920618
US 1992-900618 A 19920618
US 1992-900637 A 19920618
WO 1993-US5786 A 19930616

AB A naphthalenedicarboxylic acid is purified by contacting the impure acid with H in the presence of a hydrogenation catalyst and a solvent comprising a low mol. weight carboxylic acid, at .gtorsim.500°F and a pressure sufficient to maintain the solvent at least partially in the liquid phase and then recovering the purified naphthalenedicarboxylic acid.

L13 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1993:603180 CAPLUS
DOCUMENT NUMBER: 119:203180
TITLE: Preparation of naphthalenedicarboxylic acid esters from dialkylnaphthalenes
INVENTOR(S): Shimora, Yasuhiro; Yoshida, Mutsumi
PATENT ASSIGNEE(S): Shinnittetsu Kagaku, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent

LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05163206	A2	19930629	JP 1991-351773	19911216

PRIORITY APPLN. INFO.: JP 1991-351773 19911216
OTHER SOURCE(S): CASREACT 119:203180
AB Naphthalenedicarboxylic acid esters are prepared by oxidation of dialkylnaphthalenes or their oxidized derivs. by mol. O-containing gases in solns. comprising lower fatty acid-containing solvents and catalysts containing Mn and/or Co and Br followed by esterification of the heavy metal-containing naphthalenedicarboxylic acid (I) with alcs. in presence of aromatic sulfonic acid catalysts and mineral acids. 2,6-Diethylnaphthalene was added to an AcOH solution containing Co acetate, Mn acetate, and NaBr under air supplying at 20 kg/cm2 G and 190° over 2 h to give 92% crude 2,6-I, which was esterified with MeOH in presence of p-MeC6H4SO3H and H2SO4 at 160° for 2 h to give 96.3% 2,6-I di-Me ester.

L13 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1993:495156 CAPLUS
DOCUMENT NUMBER: 119:95156
TITLE: Preparation of 2,7-naphthalenedicarboxylic acid from dialkylnaphthalenes
INVENTOR(S): Koide, Shunichi; Nakamura, Kazumoto; Yamauchi, Toshio
PATENT ASSIGNEE(S): Petroleum Energy Center Found, Japan; Showa Shell Sekiyu
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05070399	A2	19930323	JP 1991-261128	19910912

PRIORITY APPLN. INFO.: JP 1991-261128 19910912
OTHER SOURCE(S): CASREACT 119:95156
AB 2,7-Naphthalenedicarboxylic acid (I) is prepared by oxidation of 2,7-di(lower alkyl)naphthalenes by mol. O in carboxylic acid solvents in presence of catalysts comprising Co salts, Mn salts, and Br compds. 2,7-Dimethylnaphthalene, Co(OAc)2.4H2O, Mn(OAc)2.4H2O, NH4Br, and AcOH were stirred under air at 180° and 20 kgf/cm2G for 1 h to give 81% I.

L13 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1993:212677 CAPLUS
DOCUMENT NUMBER: 118:212677
TITLE: Process for preparing 2,6-naphthalene-dicarboxylic acid
INVENTOR(S): Harper, Jon J.; Kuhlmann, George E.; Larson, Keith D.; Mcmahon, Rosemary F.; Sanchez, Paul A.
PATENT ASSIGNEE(S): Amoco Corp., USA
SOURCE: U.S., 13 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5183933	A	19930202	US 1991-776812	19911015
CA 2098485	AA	19930416	CA 1992-2098485	19921014
CA 2098485	C	20050125		
WO 9308151	A1	19930429	WO 1992-US8974	19921014
W: CA, JP, KR				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE				
EP 562105	A1	19930929	EP 1992-923188	19921014
EP 562105	B1	20000426		
R: BE, DE, ES, FR, GB, IT, NL				
JP 06503586	T2	19940421	JP 1993-507894	19921014
JP 3390169	B2	20030324		
ES 2145749	T3	20000716	ES 1992-923188	19921014
SG 94682	A1	20030318	SG 1996-3850	19921014
PRIORITY APPLN. INFO.:			US 1991-776812 A	19911015
			WO 1992-US8974 W	19921014

AB A process for the preparation of 2,6-naphthalenedicarboxylic acid is claimed which comprises the oxidation of 2,6-**dimethylnaphthalene** in the presence of mol. **oxygen** and a carboxylic acid as a solvent and a catalyst containing **cobalt**, **manganese** and **bromine** . The 2,6-naphthalenedicarboxylic acid thus prepared is suitable as starting material for the preparation of polyethylene 2,6-naphthalate. A process for catalyst recovery is also claimed. **Oxygen** was pumped into a continuous (steady state) oxidation reactor charged with **cobalt** diacetate tetrahydrate and **manganese** diacetate tetrahydrate and aqueous HBr and **acetic acid** (solvent) and a 2,6-**dimethylnaphthalene** feed (98.5% pure) was charged to the reactor; a 81.98% molar yield of 2,6-naphthalenedicarboxylic acid was obtained. The catalyst-containing mother liquor was recycled.

L13 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:	1988:454451 CAPLUS
DOCUMENT NUMBER:	109:54451
TITLE:	Autoxidation of 2,6-dimethylnaphthalene catalyzed by **cobalt-manganese-bromine** catalyst in **acetic acid**
AUTHOR(S):	Kamiya, Yoshio; Taguchi, Toshiki; Futamura, Shigeru
CORPORATE SOURCE:	Fac. Eng., Univ. Tokyo, Tokyo, 113, Japan
SOURCE:	Nippon Kagaku Kaishi (1987), (10), 1772-8 CODEN: NKAKB8; ISSN: 0369-4577
DOCUMENT TYPE:	Journal
LANGUAGE:	Japanese
OTHER SOURCE(S):	CASREACT 109:54451

AB The effects of some reaction conditions on the autoxidn. of 2-**dimethylnaphthalene** catalyzed by **cobalt-manganese**-bromide ions in **acetic acid** were studied at 65-200°. The oxidation of each Me substituent proceeded one after another to carboxylic acid via aldehyde by successive reaction. The conversion of substrate was remarkably decreased with increasing substrate concentration, suggesting that the presence of naphthalene ring retarded the oxidation reaction. It was also observed that the rate of oxidation was gradually decreased as the bromide ion was converted to the inactive form of organic bromide. Although Me substituents on naphthalene ring can be oxidized faster than those on benzene ring, the overall oxidation of 2,6-**dimethylnaphthalene** proceeded rather slowly at 90°, because of some retardation effects above mentioned and low solubility of formylnaphthoic acid in **acetic acid**. However, the oxidation of substrate to 2,6-naphthalenedicarboxylic acid proceeded smoothly at 150° under **oxygen** pressure of 10 bar, resulting in a good yield as high as 85%.

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=> d his

     (FILE 'HOME' ENTERED AT 17:25:56 ON 10 JAN 2006)

     FILE 'REGISTRY' ENTERED AT 17:26:05 ON 10 JAN 2006
                E NAPHTHALENE DICARBOXYLIC ACID/CN
                E NAPHTHALENE DICARBOXYLIC ACID/CN
L1          7713 S NAPHTHALENE DICARBOXYLIC ACID

     FILE 'CAPLUS' ENTERED AT 17:28:07 ON 10 JAN 2006
L2             0 S  871210-01-4/PREP
                S 871210-01-4/REG#

     FILE 'REGISTRY' ENTERED AT 17:28:44 ON 10 JAN 2006
L3             1 S 871210-01-4/RN

     FILE 'CAPLUS' ENTERED AT 17:28:44 ON 10 JAN 2006
L4             0 S L3

     FILE 'CAPLUS' ENTERED AT 17:29:06 ON 10 JAN 2006
L5             0 S  871210-01-4/PREP
                S 871210-01-4/REG#

     FILE 'REGISTRY' ENTERED AT 17:29:30 ON 10 JAN 2006
L6             1 S 871210-01-4/RN

     FILE 'CAPLUS' ENTERED AT 17:29:30 ON 10 JAN 2006
L7             0 S L6
L8         13989 S L1
L9            59 S L8 AND DIMETHYLNAPHTHALENE (L) (OXYGEN OR AIR)
L10           32 S L9 AND COBALT AND MANGANESE
L11           17 S L10 AND BROMINE
L12           12 S L11 AND SOLVENT
L13            9 S L11 AND ACETIC ACID

=> s l13 and dicarboxylic acid
          61818 DICARBOXYLIC
             12 DICARBOXYLICS
          61820 DICARBOXYLIC
                  (DICARBOXYLIC OR DICARBOXYLICS)
        4083799 ACID
        1506026 ACIDS
        4569502 ACID
                  (ACID OR ACIDS)
          53506 DICARBOXYLIC ACID
                  (DICARBOXYLIC(W)ACID)
L14           2 L13 AND DICARBOXYLIC ACID

=> d l14 ibib ab 1-2

L14  ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:         2004:143223  CAPLUS
DOCUMENT NUMBER:          140:181971
TITLE:                    Preparation method of naphthalene dicarboxylic
                          acid
INVENTOR(S):              Lee, Jong-in; Kim, Han-seok; Kim, Byung-hee; Roh,
                          Hang-duk; Lee, Youn-seo; Jo, Joon-sang
PATENT ASSIGNEE(S):       SK Chemicals Co., Ltd., S. Korea
SOURCE:                   PCT Int. Appl., 27 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:
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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004015003	A2	20040219	WO 2003-KR883	20030502
WO 2004015003	A3	20040715		
W: JP, US				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
EP 1542959	A2	20050622	EP 2003-719253	20030502
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK				
JP 2005535703	T2	20051124	JP 2004-527406	20030502
PRIORITY APPLN. INFO.:			KR 2002-46765 A	20020808
			WO 2003-KR883 W	20030502

AB The present invention relates to a method for the preparation of naphthalene **dicarboxylic acid**, and more particularly, to a method for the preparation of naphthalene **dicarboxylic acid** by oxidizing **dimethylnaphthalene** with **oxygen** in **air** in the presence of **acetic acid** solvent using the metal catalysts of **cobalt** and **manganese**, and using **bromine** as a reaction initiator, wherein the temperature of said oxidation reaction is 155-180°. The method for the preparation of naphthalene **dicarboxylic acid** of the invention enables the preparation of naphthalene **dicarboxylic acid** having high purity with a high yield in an economical way at a low temperature

L14 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1993:212677 CAPLUS
DOCUMENT NUMBER: 118:212677
TITLE: Process for preparing 2,6-naphthalene-**dicarboxylic acid**
INVENTOR(S): Harper, Jon J.; Kuhlmann, George E.; Larson, Keith D.; Mcmahon, Rosemary F.; Sanchez, Paul A.
PATENT ASSIGNEE(S): Amoco Corp., USA
SOURCE: U.S., 13 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

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CA 2098485	C	20050125		
WO 9308151	A1	19930429	WO 1992-US8974	19921014
W: CA, JP, KR				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE				
EP 562105	A1	19930929	EP 1992-923188	19921014
EP 562105	B1	20000426		
R: BE, DE, ES, FR, GB, IT, NL				
JP 06503586	T2	19940421	JP 1993-507894	19921014
JP 3390169	B2	20030324		
ES 2145749	T3	20000716	ES 1992-923188	19921014
SG 94682	A1	20030318	SG 1996-3850	19921014
PRIORITY APPLN. INFO.:			US 1991-776812 A	19911015
			WO 1992-US8974 W	19921014

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process for catalyst recovery is also claimed. **Oxygen** was pumped into a continuous (steady state) oxidation reactor charged with **cobalt** diacetate tetrahydrate and **manganese** diacetate tetrahydrate and aqueous HBr and **acetic acid** (solvent) and a 2,6-**dimethylnaphthalene** feed (98.5% pure) was charged to the reactor; a 81.98% molar yield of 2,6-naphthalenedicarboxylic acid was obtained. The catalyst-containing mother liquor was recycled.